

MODULE V - GROUNDWATER MONITORING

V.A. POST-CLOSURE GROUNDWATER MONITORING

- V.A.1. The Permittee shall monitor groundwater in the uppermost aquifers as described in Attachment 4 and as described below, in a manner that will monitor the release of hazardous constituents from the M-136 Burning Area, in compliance with R315-8-11.5(b)(2), R315-8-7, and R315-8-6 during the post-closure care period as defined in Condition V.C.4.
- V.A.2. Solid waste management units (SWMUs) may be subject to provisions of this Module. The Executive Secretary shall determine which SWMU's may be subject to some or all of the provisions of this Module. The Permittee must comply with the provisions of R315-8-6.12.
- V.A.3. The Permittee must follow all of the provisions listed under R315-8-6, Groundwater Protection, and as defined by the conditions of this permit. For the purposes of this permit, the R315-8-6 rules for groundwater protection shall apply to the M-136 Burning Area.
- V.A.3.a. The Point of Compliance is a vertical surface located at the hydraulically downgradient boundary of the M-136 Burning Area. The present compliance point wells are listed in Condition V.A.4.
- V.A.3.b. Upon approval of a Corrective Action Plan (CAP), per Condition VI.A, and as part of the CAP, the Permittee shall provide compliance wells for the corrective action systems which shall follow the provisions of Module V. These monitoring wells shall also be identified as compliance wells.
- V.A.4. The Permittee shall maintain groundwater monitoring systems, which consist of monitoring wells situated hydraulically upgradient and downgradient of the M-136 and in or near identified areas of contamination. The hydraulically upgradient monitoring wells will consist of the following wells: C-6, C-8, and A-10, which shall serve as background monitoring wells; and the hydraulically downgradient monitoring wells will consist of the following wells: A-2, A-3, A-4, A-5, A-6, A-7, C-1, C-2, B-9, which shall be the compliance point monitoring wells. The monitoring wells and compliance point monitoring well locations are presented in Attachment 4. The Permittee may add wells as specified in Conditions V.D.1.i. and j.

- V.A.5. The following monitoring wells situated hydraulically upgradient and downgradient of the M-136 Burning Area are grouped into monitoring well systems based upon the uppermost aquifers identified in Attachment 4:
- System 1; C-6, C-8, A-4, A-5, A-6, A-7, C-1, C-2,.
- System 2; A-10, A-2, A-3, B-9.
- V.A.6. The Permittee shall monitor groundwater as it enters and exits each of the affected areas. The purpose of this monitoring is to ensure that the treatment or containment is removing the hazardous constituents specified in Condition V.B.1.a of this module to a level below the concentration limits listed in Attachment 7 and concentration levels to be established in Module VI. Issuance of this permit constitutes the approval of the Executive Secretary to allow treatment and containment methods to remove hazardous constituents from the groundwater.
- V.A.7. The Permittee shall monitor and record the rate and volume of the flow of groundwater as it is pumped from compliance and monitoring wells and as it enters and exits the affected areas from M-136.
- V.A.8. If the Permittee chooses to use a groundwater treatment system and if for any reason the system is unable to operate for a period of ninety (90) days or longer and if during this ninety (90) day period the groundwater treatment system contains untreated groundwater, the Permittee must provide for the removal and disposal of the groundwater from the system as specified in Conditions VI.E.3.a, b, and c.
- V.A.9. The Permittee shall monitor and record the concentration of constituents listed in Condition V.B.1.a. in the unconfined and confined aquifers, and shall submit maps to show the concentration of each of the hazardous constituents in these two aquifers as specified in Condition V.F.4.
- V.B. REQUIRED PROGRAM
- V.B.1. The Permittee shall conduct a monitoring and response program as follows for the M-136 subject to these provisions:
- V.B.1.a. The Permittee has submitted M-136 groundwater quality assessment reports. These assessment reports have indicated that the following hazardous

constituents listed in Table E-1 were detected in the uppermost aquifers and have been detected beyond the compliance point. The Permittee must provide for the monitoring of these Table E-1 hazardous constituents:

TABLE E-1

Acetone
Ammonia
Arsenic
Barium
Benzene
Bromomethane
Chloroethane
Chloroform
Chromium
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethene
Manganese
Nitrate
Perchlorates
Sulfate
Tetrachloroethene
Tin
Total Dissolved Solids
1,1,1-Trichloroethane
Trichloroethene

- V.B.1.b. Because the groundwater protection standard under R315-8-6.3. and Condition V.C. of this permit has been exceeded, and the Permittee has commenced a groundwater quality assessment program, the Permittee shall institute a groundwater quality assessment program, the Permittee shall institute a Corrective Action Program (CAP) as defined under R315-8-6.11., and Module VI. The purpose of this CAP will be to remove the hazardous waste constituents listed on Table E-1 from the groundwater. The method of treatment for the removal or containment of the hazardous constituents listed in Table E-1 shall be proposed in the CAP and submitted within 90 days of permit issuance as per Condition VI.A.

- V.B.1.c. The Permittee may apply for Alternate Concentration Limits (ACL). Each petition must meet all the requirements of R315-8-6.
- V.B.1.d. If submitted, the Executive Secretary shall determine, within 180 days, the appropriateness of any ACL petition, and either accept, or reject, the concentration level. If the Executive Secretary determines that the level is appropriate, the Permittee and/or the Executive Secretary shall institute a modification to the permit in accordance with Condition I.D.3.
- V.B.1.e. Upon termination of the CAP outlined in Condition VI.A per R315-8-6.11. the Permittee shall institute and maintain a detection monitoring program under R315-8-6.9. and Condition V.E. of this permit.
- V.B.2. The Permittee shall follow all of the elements of the required program as defined in this Module.
- V.C. GROUNDWATER PROTECTION STANDARD
- V.C.1. The Permittee shall monitor the groundwater, as specified in Condition V.A. to determine whether the corrective action program outlined in Module VI of this permit is effective in removing hazardous waste constituents from the groundwater and to determine compliance with the groundwater protection standard under R315-8-6.3.
- V.C.2. The hazardous waste constituents listed on Table E-2 of Attachment 7 will comprise the groundwater protection standard. Table E-2.1, List 1, hazardous constituents shall represent the hazardous constituents which are sampled of all compliance wells on a semi-annual basis. Four (4) samples will be extracted during this interval for each compliance well, per the sampling plan of Attachment 4, for Table E-2.1, List 1, hazardous constituents.
- V.C.2.a. Upon commencement of a CAP of Condition VI.A., all monitoring wells will be sampled per the CAP and until the CAP ceases to be required for groundwater corrective action.
- V.C.2.b. Table E-2 of Attachment 7 identifies the approved concentration limits and analytical methods of detection for hazardous constituents of Table E-2.1 of Attachment 7.
- V.C.2.c. Table E-2.1, List 2 of Attachment 7 shall represent hazardous constituents which

are sampled in addition to the hazardous constituents of Table E-2.1, List 1 of Attachment 7 on a annual basis upon issuance of this permit. One sample will be extracted during this time interval for each compliance well

- V.C.2.d. Table E-2.1, List 3 of Attachment 7 shall represent hazardous constituents which are sampled every three years commencing upon issuance of this permit in addition to the sampling of hazardous constituents of Table E-2.1, List 1 and List 2. One sample shall be extracted during this time interval for each compliance well, per the sampling plan of Attachment 4, for Table E-2.1 hazardous constituents.
- V.C.2.e. If any hazardous constituents of Table E-2.1, List 2 and List 3 are detected, then Table E-2.1, List 1 shall be modified by the Executive Secretary to include those constituents, unless the Permittee can successfully document to the Executive Secretary that the constituent of concern is not statistically detected.
- V.C.2.f. If alternate concentration limits are approved per Condition V.B.1.c., the Executive Secretary shall institute a permit modification in accordance with Condition I.D.3. of this permit to incorporate the approved alternate concentrations limits into the Groundwater Protection Standard.
- V.C.3. Required SW-846 test methods and concentration limits are listed in Attachment 7. If an alternate test method is to be proposed for use, the Permittee must submit an application for a permit modification as specified in Condition I.F.13.b. If at any time during the duration of this permit, the Executive Secretary determines that the test methods specified in Table E-2 is not sensitive enough to produce the required results, and the test method detection limits are lower than the concentration limits of Attachment 7, the Executive Secretary shall require the Permittee to use alternate test methods (e.g. 500 or 600 series test methods). If the Executive Secretary requires a change to the test method(s), the Executive Secretary will modify the permit.
- V.C.4. As indicated by R315-8-7, the post-closure care period for the M-136 is thirty (30) years from the effective date of this permit. If the groundwater protection standard in Condition V.C. above is exceeded after thirty (30) years the Permittee must continue corrective action as specified in Condition VI.G.

V.D. GROUNDWATER MONITORING REQUIREMENTS

V.D.1 General Requirements

The Permittee shall comply with the following general requirements for groundwater monitoring:

- V.D.1.a. The groundwater monitoring system shall consist of the wells specified in V.A.4. and V.A.5..
- V.D.1.b. All monitoring wells shall be constructed in accordance with the provisions in R315-8-6.8(c) and Condition V.D.2.
- V.D.1.c. The groundwater monitoring program shall include sampling and analysis procedures defined in R315-8-6.8(d) and (e). The Permittee shall submit to the Executive Secretary any revision to the Field Sampling Plan in Attachment 4. The Permittee shall obtain approval for any changes to the Field Sampling Plan prior any sampling events specified in Condition V.E.3.
- V.D.1.d. The Permittee shall follow the requirements for measurement of the groundwater surface elevation of R315-8-6.8.(f).
- V.D.1.e. The Permittee shall sample groundwater as it enters and exits affected areas. There shall be a sufficient number of samples taken, as specified in Sampling Plan located at the end of Attachment 4. Each sampling point, as specified in Condition V.E.6., shall be protected from contamination between sampling events. The Permittee shall collect water samples consistent with the sample and analysis procedures defined in R315-8-6.8(d) and (e) and consistent with the sampling plan found at the end of Attachment 4.
- V.D.1.f. The Permittee shall estimate and record the rate and volume of the flow of groundwater through the affected areas. The Permittee shall follow the plan described in Attachment 4, for the measurement and recording of this information.
- V.D.1.g. If the Executive Secretary receives information indicating that the surveyed well apron elevations of the wells in the groundwater system(s) as specified in Condition VI.C. or the groundwater monitoring system as specified in Conditions V.A.4. and 5., are inadequate, the Executive Secretary shall require the Permittee to resurvey any or all of these well apron elevations.
- V.D.1.h. The Permittee shall notify (Condition I.M.2) the Executive Secretary orally or in writing at least ten (10) working days prior to any sampling event required under this permit.

- V.D.1.i. The Permittee may add new wells as part of the monitoring well system only upon approval of the Executive Secretary. Approval for changes to the monitoring well system shall constitute a permit modification. The Permittee shall follow the procedures specified in Condition I.D.2. for modification of the permit.
- V.D.1.j. The Permittee must at all times maintain a monitoring well system as specified in Condition V.D.1.a. The compliance point wells listed in Condition V.A.4. and V.A.5., may not be removed from the monitoring well system without approval of the Executive Secretary and submitting a permit modification, per R315-3-15.
- V.D.1.k. The Executive Secretary, may at any time upon written notification to the Permittee, require any or all of the A, B, or C series monitoring wells presently installed around M-136 to be added to the monitoring well system, as specified in Condition V.A.4.
- V.D.1.l. The Permittee shall provide for the proper disposal of contaminated groundwater generated during groundwater monitoring well sampling and during the development of new monitoring wells. The Permittee shall dispose of the water as specified in Condition VI.E.2.c.
- V.D.1.m. The Permittee shall monitor and sample all groundwater wells for the presence of hazardous constituents identified in Condition V.C. The wells shall be sampled at a frequency and in a manner consistent with Condition V.C.
- V.D.2. Well Location Installation and Construction
- The Permittee shall locate, install, construct, and maintain new groundwater monitoring wells as specified below;
- V.D.2.a. Well construction shall follow the techniques described in the Technical Enforcement Guidance Document (TEGD), OSWER-9950.1, September 1986 or most current, approved edition. All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing shall be screened or perforated and packed with gravel or sand where necessary, to enable collection of groundwater samples. The annular space, the space between the bore hole and well casing above the sampling depth, must be sealed to prevent contamination of samples and the groundwater.

- V.D.2.b. The Permittee shall construct and maintain new monitoring wells in accordance with plans and specifications to be submitted to the Executive Secretary for approval. The Executive Secretary will approve in writing the following: number, location, depth, and design of all new wells prior to installation. Installation of new monitoring wells shall constitute a Class 2 permit modification. The Permittee shall follow the procedures specified in Condition I.D.2. for permit modifications.
- V.D.2.c. Additional groundwater monitoring wells shall be installed to maintain compliance if subsurface conditions significantly change after permit issuance. Such changes may include, but are not limited to, water level elevation or apparent flow direction changes, or detection of one of the hazardous constituents in a monitoring well. If hazardous waste constituents exceeding the groundwater protection standard concentration limits, as defined in Condition V.C. of this Module, are detected in the furthestmost hydraulically downgradient monitoring well(s), the Permittee shall install additional groundwater monitoring wells further downgradient.
- V.D.2.d. Upon notification by the Executive Secretary in writing or as a result of a compliance action the Permittee may be required to install and sample additional wells at any time during the post-closure or compliance periods if new information or unforeseen circumstances reveal a need for additional monitoring to protect human health and the environment.
- V.D.2.e. The Permittee shall submit monitoring well completion reports which shall include, as applicable to each well, boring logs, sieve analysis (grain size), standard penetration tests, analytical tests performed on soils (Atterberg limits, etc.), water level elevations, groundwater contour maps, well development results including recharge rates, cross sections or fence diagrams as well as all other data, to be submitted within ninety (90) days after completion of the wells which are installed after permit issuance.
- V.D.2.f. Existing monitoring wells shall be maintained in a fully operational condition for the duration of this permit. The Permittee shall notify the Executive Secretary within seven (7) days when a well is no longer properly functioning (including the presence of sandy or silty materials, and cracked or broken casings). The Executive Secretary shall approve the conditions for replacement or correction of improperly operating well(s). Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well shall constitute a Class 1 permit modification.

- V.D.2.g. The Permittee shall estimate on an annual basis the depth to the bottom of all groundwater monitoring wells. This information shall be recorded on well purging volume calculation sheets. If a problem is observed, the Permittee shall follow the procedures described above in Condition V.D.2.f. regarding notification and corrective procedures.
- V.D.2.h. The Executive Secretary may approve, upon successful demonstration, the permanent removal of any wells listed in Attachment 4, or any wells installed after permit issuance. A request for the removal of wells shall constitute a Class 2 permit modification.
- V.D.2.i. The Permittee shall permanently remove wells from the monitoring well system in accordance with the plugging and abandonment procedures described in Attachment 6 and as specified in V.D.2.h, above. Well plugging and abandonment methods shall be submitted to the Executive Secretary thirty (30) days prior to the date the wells are to be removed from the monitoring program.
- V.D.2.j. The Permittee shall provide for the proper disposal of groundwater generated during the development of any newly installed monitor wells. The Permittee shall dispose of this water as specified in Condition VI.E.2. a, b, and c.
- V.D.3. Sampling and Analysis Procedures
- V.D.3.a. The Permittee must include and maintain consistent sampling and analysis procedures in the groundwater monitoring program that are designed to ensure reliable monitoring results of groundwater quality below the M-136. As required by R315-8-6.8(d), the program shall include procedures and techniques for:
- V.D.3.a.i. sample collection;
- V.D.3.a.ii. sample preservation and shipment;
- V.D.3.a.iii. analytical procedures;
- V.D.3.a.iv. chain-of-custody control; and
- V.D.3.a.v. quality assurance and quality control.
- V.D.3.b. The sampling and analytical methods must be appropriate for groundwater

sampling and accurately measure hazardous waste constituents in groundwater samples, as required by R315-8-6.8(e).

- V.D.3.c. The Permittee shall use the following techniques and procedures when obtaining samples and analyzing samples from the groundwater monitoring wells and for obtaining and analyzing water samples from the affected areas.
- V.D.3.c.i. Samples from all wells shall be collected by the techniques described in the approved Sampling Plan, located at the end of Attachment 4.
- V.D.3.c.ii. All samples shall be preserved and transported in accordance with the procedures specified in the approved Sampling Plan of Attachment 4.
- V.D.3.c.iii. After the Sampling Plan is approved, any change to the sampling or analysis procedures specified in Attachment 4, Module V, and Module VI, or to the Sampling Plan, shall constitute a Class 1 permit modification.
- V.D.3.c.iv. All samples shall be analyzed according to test methods delineated in Condition V.C. or an equivalent EPA-approved method that has been pre-approved, by the Executive Secretary as per Permit Condition I.F.13.b. In addition:
1. All major peaks greater than 25% of the peak height of the closest internal standard will be identified to the extent analytically possible, using the most current National Bureau of Standards (NBS) Library. The quantity of these compounds will be estimated and reported based upon the closest internal standard.
 2. Any major peak found during the analysis may become a target parameter.
 3. For each quarterly, semi-annual, or annual sampling event under the groundwater monitoring program, the use of quality control sample data shall be explained in full detail in the Sampling Plan and in the semi-annual reports. The Permittee shall collect and analyze for each daily sampling event, at least one (1) field blank and, one (1) set of replicates representing at a minimum, 10% of the total number of samples. The laboratory shall provide method blanks, spikes, and duplicates. If nondedicated sampling equipment is used, the Permittee shall collect and analyze one (1) decontamination blank for analysis at each daily sampling event. The Permittee shall reject data from any field, decontamination, or laboratory blanks exceeding three (3) times the method detection limit for any organic parameter. The Permittee shall resample all wells from which data has

not been validated. Qualifiers as defined by the EPA Contract Lab Program (CLP), shall be indicated on all organic laboratory reports when blanks indicate contamination above the method detection level.

4. The Executive Secretary may request at any time all laboratory QA/QC documentation and supporting data on any sampling episode. The raw organics information for required sampling and analysis, including organics gas chromatographic printouts, mass spectral analyses, and QA/QC surrogate and spiking results shall be retained at Thiokol Facility, Box Elder County, Utah throughout the post-closure care period.

5. All samples shall be tracked and controlled using the chain-of-custody procedures specified in the Sampling Plan and as indicated in Attachment 4.

6. In case of loss of sample integrity (i.e. breakage, loss), resampling shall take place within seven (7) days of the completion of that sampling event.

V.D.4. Groundwater Elevation

V.D.4.a. The Permittee shall determine the groundwater surface elevation in all of the monitoring wells semi-annually. The location of the monitoring wells are found in Attachment 4. If the Executive Secretary receives information indicating the need for additional measurement of groundwater surface elevations, the Executive Secretary will notify the Permittee that the permit must be modified to change the frequency of monitoring of groundwater surface elevations. This change shall constitute a Class 1 permit modification.

V.D.4.b. The Permittee shall determine the groundwater surface elevation in all wells specified in Condition V.A.4. and 5. The Permittee shall, on an annual basis, construct maps of the potentiometric surface in both the unconfined and confined aquifers in the areas immediately adjacent to all wells. If, based on semi-annual monitoring as specified in Condition V.D.4.a. above, the Executive Secretary determines the need for additional information, the Permittee will be required to install additional monitoring wells. In this case, the Executive Secretary will notify the Permittee in writing that the permit must be modified as specified in Condition V.D.2.b.

V.D.4.c. The Permittee shall determine the groundwater flow rate and direction in the unconfined and confined aquifers based on groundwater surface elevation measurements and on resurveyed well apron elevations as required by V.D.1.g.

An updated potentiometric map must be submitted to the Executive Secretary with each annual report as specified by Condition V.F.4.

- V.D.4.d. If, based on the monitoring as specified in Conditions V.D.4.a., b, and c, and by Conditions V.E.1-5, the Executive Secretary receives information to indicate that the groundwater flow system has been altered to the extent that new areas of the uppermost aquifer become contaminated with chromium, then the Executive Secretary will require the Permittee to dispose of all water generated due to well installation or well sampling as specified in Condition VI.E.2.

V.E. MONITORING PROGRAM AND DATA EVALUATION

The Permittee shall determine groundwater quality as follows:

- V.E.1. The Permittee shall collect, preserve, and analyze groundwater samples pursuant to Permit Condition V.D., and at the frequency indicated in Attachment 4.
- V.E.2. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually. This information shall be included in the January 15 semi-annual report specified by Condition V.F.4.
- V.E.3. In addition to the regular, on-going sampling program, the Permittee shall analyze samples from all wells in the groundwater monitoring well system immediately before the start of the corrective action program. The wells to be sampled are specified in Condition V.A.4.
- V.E.4. After the initial sampling event, the Permittee shall sample the wells in the monitoring well systems semi-annually. Compliance point wells shall also be sampled semi-annually. These samples shall be analyzed for the presence of the hazardous constituents listed in Table E-2.1, List 1 of Attachment 7.
- V.E.5. The Permittee shall sample groundwater as it enters and exits the groundwater treatment or containment units phases of operation of any system(s) for removal or containment of groundwater. These samples shall be taken at points that are approved by the Executive Secretary. Sample points shall be proposed for approval which will adequately delineate the contaminated.
- V.E.6. During the implementation of CAP the Permittee shall collect groundwater samples at a frequency which will satisfy all the provisions of R315-8-6. Frequencies shall be submitted for approval in the CAP of Condition VI.A.

- V.E.7. Following the implementation of the CAP all phases of operation of the groundwater system(s) the Permittee shall sample the groundwater at each well of Condition V.E.6. These samples shall be collected according to the procedures specified in the Sampling Plan of Attachment 4.
- V.E.8. The Permittee shall analyze samples collected from the monitoring wells, and shall analyze groundwater samples that enter and exit the groundwater treatment units using the test methods listed in Attachment 7. Any change to this procedure would require a permit modification to be approved by the Executive Secretary in writing as per R315-3-15.
- V.E.9. If a permittee constructs and implements a pump and treat corrective action system, the Permittee shall monitor and record the rate and volume of the flow of groundwater as it is pumped from the extraction wells, as it enters and exits the groundwater treatment units, and as it is discharged. This monitoring shall occur weekly. A table summarizing the data collected during the weekly monitoring shall be submitted as a part of each of the semi-annual reports specified in Conditions V.F.2. and V.F.4.
- V.E.10. If the monitoring program described by Condition V.D.4. indicates that the groundwater in monitoring wells that are located at or near the upgradient facility boundary have been affected by the groundwater treatment system, the Permittee will be required to sample additional wells as specified by the Executive Secretary, and as specified in Conditions I.D.2. and V.D.1.i.
- V.F. REPORTING AND RECORDKEEPING
- V.F.1. The Permittee shall enter all monitoring, testing and analytical data obtained pursuant to Condition V.E. in the Thiokol Operating Record.
- V.F.2. The Permittee shall submit a report on the effectiveness of the corrective action program within six (6) months of CAP implementation as specified in Condition V.E.7. and 8. This report shall include the information listed in Condition V.F.4. below and shall also include a summary report on the effectiveness of the CAP.
- V.F.3. The information to be submitted semi-annually, as specified in V.D.4. and V.E.5. and all other parts of this permit shall be submitted at the frequency that is indicated in V.F. Following the first report, the Permittee shall submit semi-annual reports on the effectiveness of the corrective action program. These

reports shall be submitted no later than January 15 and July 15 of each year. The semi-annual reports shall contain the information and be submitted at the frequency as specified in Table 5 below:

TABLE 5

TYPE OF INFORMATION	FREQUENCY
Weekly measurements of volume and rate of groundwater flow in the groundwater treatment system.	semi-annual
Results of sample analyses including; concentration of hazardous constituents, and a summary of the QA/Qc data listed in Condition V.D.3.	semi-annual
Measurements of static water levels and total well depths estimates.	semi-annual
Results of annual model recalibration and a summary analysis of annual model results.	annual
Contaminant concentration maps of the confined and unconfined aquifers.	annual
Potentiometric maps of the unconfined and confined aquifers. This map shall indicate the rate and direction of flow, as indicated in V.D.4.b	annual

V.F.4 The Permittee shall submit to the Executive Secretary the analytical results required by Permit Conditions V.D., V.E., and the groundwater elevation data required by Condition V.D.4. in accordance with the following schedule:

SUBMISSION SCHEDULE

Samples and data collected during the months of	Semi-annual sampling events	Results due to the Executive Secretary
January-March		April 15
April-June	January-June	July 15
July-September		October 15
October-November	June-December	January 15

V.G. ASSURANCE OF COMPLIANCE

The Permittee shall assure that monitoring and corrective action measures necessary to achieve compliance with the groundwater protection standard are taken during the term of the permit.

V.H. REQUEST FOR PERMIT MODIFICATION

- V.H.1 If the Permittee or the Executive Secretary determines the groundwater protection standard is being exceeded the Permittee may submit to the Executive Secretary an application for a permit modification to establish an alternate concentration limit within 180 days of the effective date of this permit for existing exceedences and 180 days from the determination of an exceedence new newly identified exceedences. A petition for an alternate concentration limit(s) shall constitute an application for a Class 3 permit modification.
- V.H.2 If the Permittee determines that the groundwater treatment system requires installation of additional extraction wells or injection wells the Permittee shall submit an application for a permit modification. This change will constitute a Class 2 permit modification.
- V.H.3 If the Permittee determines the need to install a process to treat the groundwater for heavy metals, the Permittee shall submit an application for a permit modification. The change to the permit will constitute a Class 2 permit modification.
- V.H.4 If the Permittee is required to make changes to the groundwater treatment system in order to implement the additional measures as specified in Condition VI.A.6., the Permittee shall submit an application for a permit modification. This change to the permit will constitute a Class 2 permit modification.
- V.H.5 If the Permittee is required to add a process to treat the effluent water following treatment processes, as indicated in Condition VI.D, the Permittee shall submit an application for a permit modification. This change will constitute a Class 2 permit modification.
- V.H.6 After this permit is issued, the Permittee shall submit an application for a permit modification for any change in this permit.